IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:	Marion Wendt-Gindsberg Frank Wendt	:	
Serial No.	09/646,745	:	Patent Application
Filing Date:	November 10, 2000	:	**PLATED GRINDING TOOL**
Examiner:	Dung V. Nguyen	:	
Group Art Unit:	3723	:	
International Application No.	PCT/EP99/01934	:	
International Filing Date:	March 22, 1999	:	

DECLARATION OF JOACHIM M. LÜDCKE
PURSUANT TO 35 CFR 1.132

I, Joachim M. Lüdcke declare as follows:

1. I am the attorney for the German national application upon which the international application for this national phase U.S. Application is based.

2. I represent the named inventors and the assignee for this application, U.S. Serial No. 09/646,745 for "Plated Grinding Tool".

Education

3. (1982 to 1991) – Student with the Technical University of Braunschweig, Germany, with a diploma degree (June 21, 1991) in mechanical engineering (Diplom-Ingenieur).

4. (1991 to 1994) – Training for German patent attorney with a German Patent Attorney, the German Patent, and Trademark Office and the German Federal Patent Court, and passing official examination in November 1994.

Experience

5. (1987 to 1991) - Technical experience in precision engineering including digital electronics and optics, design of mechanical devices including the application of CAD/CAM technologies in production at the Institut für Feinwerk- Meß- und Regelungstechnik, Braunschweig, Germany.

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS EXPRESS MAIL NO. EL399418745US IN AN ENVELOPE ADDRESSED TO: Box Non-fee Amendment Commissioner for Patents, WASHINGTON, D.C. 20231, ON

January 15, 2002

PAUL A. GEE & ASSOCIATES

6. (1986) - Employed at Volkswagen AG, Braunschweig plant, in production technologies, tool making and maintenance dept. as a tool maker.

7. (1982) - Employed at Metallbau Schulte-Zurhausen GmbH, Gladbeck, Germany, as a locksmith and metal worker in a locksmith's shop and in steel construction.

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8. I prepared the original specification that was filed as the International application (PCT) No. PCT/US99/01934 which was used as the basis for filing the national phase of the above U.S. Application.

9. I have reviewed and studied the various art that is identified in the Information Disclosure Statements and in the examination of the PCT.

10. I have reviewed the Examiner's rejections based on 35 USC §112 in the Office Action dated June 26, 2001.

11. The Examiner has rejected the claims because the Examiner believes that the claims contain subject matter that is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner further identifies features such as an automatically acting clamping apparatus, an eccentric clamping apparatus, a centrifugal clamping apparatus, a socket connection, a bayonet connection, a single-pitch screw and nut thread, multi-pitch screw and nut thread, a rectangular thread, a trapezoidal thread are not fully disclosed in the drawings and/or specification to enable one skilled in the art to make and use the invention. The Examiner has questioned how these features relate to the flap-type grinding tool, and how the features connect the grinding tool to the driving apparatus.

The Level of One of Ordinary Skill in this Art

12. In my opinion a person of ordinary skill in this art would be one who has either a degree or an equivalent to a degree from practical work experience in mechanical engineering. In addition to the education or experience level, this person would have approximately two to three years of training in designing small hand powered tools designed with the purpose of manufacture and ease of use to achieve a quality result efficiently.

Opinion and Reasons for It

13. I respectfully disagree with the Examiner that claims 25, 26, 29, 30, 36, and 37 contain subject matter that is not described in the specification of the application in such a way as to enable one skilled in the art to which it pertains or to which it is most nearly

connected to make and use the invention. In particular, features such as automatically acting clamping apparatus, an eccentric clamping apparatus, a centrifugal clamping apparatus, a socket connection, a bayonet connection, a single-pitch screw and nut thread, multi-pitch screw and nut thread, a rectangular thread, and a trapezoidal thread.

14. In my opinion, the specification does enable one skilled in the art to make and use the invention set forth in claims 25, 26, 29, 30, 36, and 37.

15. My reasons are as follows:

a) As to a socket connection, or a bayonet connection, as such, it is respectfully submitted that the particulars of the design of the same as such and how to make, is believed being basic knowledge of an engineer or a skilled machinist or tool maker, particularly as mentioned under 12. above. Reference is made to standard text book for students "W. Krause: Konstruktionselemente der Feinmechanik" [Design Elements in Precision Mechanics], 2nd edition 1993, Carl Hanser Publishers, Munich and Vienna, chapter 4.4.6., pages 290/291, describing use and design of socket and bayonet connections in general. According to information published by the DIN [German Institute for Standardization] and ISO (International Standardization Organisation) bayonet flange connections are described in DIN 13256 [German Industrial Standard No. 13256], bayonet flange connections for machine tools are described in DIN 55027 and International Standard SNV ISO 702-3. With this knowledge one skilled in the art should be easily able to make and use a socket connection, or a bayonet connection as an embodiment for a clamping apparatus for connecting the abrasive tool to a drive apparatus.

b) As to a single-pitch screw and nut thread, multi-pitch screw and nut thread, a rectangular thread, and a trapezoidal thread, as such, it is respectfully submitted that the particulars of the design of the same as such and how to make, is believed being basic knowledge of any machinist or tool maker, particularly as mentioned under 12. above. Reference is made to standard text book for apprentices and engineering students "Fachkunde für Metallberufe" [Basic Knowledge for Metal Working Professions], 44th edition 1981, Europa Teaching Material Publishers Nourney, Vollmer & Co., Wuppertal, chapter 3.6 "Threads", pages 197 to 206, describing nature and different kinds of threads, standardization of threads, making of the various kinds of threads with hand tools and machinery, measurement and quality checking of threads. Particularly, a trapezoidal thread is shown in figure 197/3, rectangular single pitch, double pitch and three pitch threads are shown exemplary in figure 198/1, a detailed description of multi-pitch trapezoidal threads is included on page 199 and figure 199/2, making of bolt and nut threads is explained on pages 200 to 204. According to information published by the DIN [German Institute for Standardization] and ISO (International Standardization Organisation) the dimensioning of trapezoidal threads is standardized in DIN 103 [German Industrial Standard No. 103], double pitch trapezoidal threads are defined in DIN 263, trapezoidal threads in general in International Standards ISO 2901, ISO 2902, ISO 2903, and ISO 2904. With this knowledge one skilled in the art should be easily able to make and use a single-pitch screw and nut thread, multi-pitch screw and nut thread, a rectangular thread, and a trapezoidal thread as an embodiment for a clamping apparatus for connecting the abrasive tool to a drive apparatus.

c) As to the embodiment of claim 26, although not expressly mentioned in the enumeration of the Examiner's listing as stated above under 11. it is respectfully reminded that an explanation of the same is included in the last paragraph of page 14 of the description of the application in question, which is believed to fully enable one skilled in the art to make and use a flap type grinding tool of the kind discussed having a support body which has a plurality of discs spaced to each other.

d) As to the eccentric clamping apparatus and centrifugal clamping apparatus, generally referred to as automatically acting clamping apparatus, of claims 25, 36, and 37, for connecting the carrier ring having the abrasive flaps thereon to the disc like central body which may be fastened to a drive apparatus, it is respectfully pointed out that an explanation of the same can be found on page 6, lines 15 to 24, page 9, lines 12 to 17, and in more detail with reference to figure 4, from page 12, line 22, to page 14, line 5 of the application in question referring to reference signs 13, 14, 15, and 16, which is believed to fully enable one skilled in the art to make and use a flap type grinding tool of the kind discussed. It is believed that there is no difficulty for one skilled in the art to understand that the automatic clamping apparatus may act either with centrifugal forces depending on turning of the tool which a disc like central body having elements extending radially outwards by centrifugal force and thus clamping the carrier ring, or that the automatic clamping apparatus may alternatively be designed with an eccentric disc like central body having elements extending radially outwards by an initial difference in rotatory speed caused by the moment of inertia when the machine starts turning, and to make use of the same for an improved flap type grinding tool. It is respectfully pointed out that neither the Examiner of the GPTO in the German parent case nor the Authorized Officer of the EPO during International Preliminary Examination found any difficulty in understanding the disclosure of this application to enable one skilled in the art to make and use the invention claimed, and I therefore find my opinion supported by these gentlemen.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Joachim M. Lüdeke

Joachim M. Lüdeke

Date: January 14, 2002

The dating stamp of the U. S. Patent and Trademark Office on this card will be taken as an indication that the accompanying paper was filed.

Applicant(s): Marion Wendt-Gindsberg et al.

Serial No. 09/646/745

02/7/2002 Letter

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